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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER 1454.1101

# TRANSMITTAL LETTER TO THE UNITED STATES

	TED OFFICE (DO/EO/US) NG UNDER 35 U.S.C. 371	<b>09/</b> 93777 <b>1</b>		
INTERNATIONAL APPLICATION NO. PCT/DE00/00955	INTERNATIONAL FILING DATE March 29, 2000	PRIORITY DATE CLAIMED March 30, 1999		
TITLE OF INVENTION MECHANICAL LINK BETWEEN Amended)	SIDE WALLS AND THE REAR WALL	OF A SHEET CASING (As		
APPLICANT(S) FOR DO/EO/US Heinz-Jürgen NIGGL	S			
Applicant herewith submits to th items and other information:	e United States Designated/Elected O	ffice (DO/EO/US) the following		
<ol> <li>Items and other information:</li> <li>This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.</li> <li>This is an express request to immediately begin national examination procedures (35 U.S.C. 371(f)).</li> <li>The US has been elected by the expiration of 19 months from the priority date (PCT Article 31).</li> <li>A copy of the International Application as filed (35 U.S.C. 371(c)(2))         <ol> <li>is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>A translation of the International Application into English (35 U.S.C. 371(c)(2)).</li> <li>Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))         <ol> <li>are transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>have been transmitted by the International Bureau.</li> <li>is not required, as the application was filed in the United States Receiving Office (RO/US)</li> </ol> </li> <li>A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>An oath or declaration of the inventor (35 U.S.C. 371(c)(4)).</li> <li>A translation of the Annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>				
Items 10-15 below concern document(s) or information included:				
<ul> <li>10. ☐ An Information Disclosure Statement Under 37 CFR 1.97 and 1.98.</li> <li>11. ☐ An assignment document for recording.     Please mail the recorded assignment document to:     a. ☐ the person whose signature, name &amp; address appears at the bottom of this document.     b. ☐ the following:     12. ☒ A preliminary amendment.     13. ☒ A substitute specification     14. ☐ A change of power of attorney and/or address letter.     15. ☒ Other items or information: International Search Report, International Preliminary Examination Report, and the first page of the published International Application. An Information Disclosure Statement will be filed later.</li> </ul>				

JC05 Rec'd PCT/PTO 0 1 OCT 2001

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SUBMITTE	ED BY: STAAS & HAL	PATENT TRA	DEMARK OFFICE		
Type Nan		fark J. Henry		Reg. No.	36,162
Signature		Makelmy		Date	Oct. 1,200

JC05 Rec'd PCT/PTO 0 1 OCT 200f

Docket No.: 1454,1101

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Heinz-Jürgen NIGGL

Serial No. NEW

Group Art Unit: To be assigned

Confirmation No.

Filed:

Examiner: To be assigned

For: MECHANICAL LINK BETWEEN SIDE WALLS AND THE REAR WALL OF A SHEET

CASING (As Amended)

#### PRELIMINARY AMENDMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Before examination of the above-identified application, please amend the application as follows:

#### IN THE TITLE

Please AMEND the title as follows:

MECHANICAL LINK BETWEEN SIDE WALLS AND THE REAR WALL OF A SHEET CASING

#### IN THE ABSTRACT:

Please REPLACE the Abstract originally filed with the enclosed Substitute Abstract attached hereto.

#### IN THE SPECIFICATION:

Please REPLACE the specification originally filed with the enclosed Substitute Specification.

#### IN THE CLAIMS:

Please REPLACE claims 1-3 and ADD new claim 4 in accordance with the following:

1. (ONCE AMENDED) A mechanical connection comprising:

a sheet metal casing having a base part, a pair of side walls and a rear wall all formed from a single sheet-metal part;

a cutout formed in each of the side walls in the region of the top rear corner; an angled section formed on the rear wall; and

hook-like extensions provided at sides of the angled section, which hook-like extensions snap into the cutouts of the side walls when the rear wall is swung into position.

- 2. (ONCE AMENDED) The mechanical connection as claimed in claim 1, wherein the hook-like extensions are sloped such that the width increases from a front to a back of the hook-like extensions.
- 3. (ONCE AMENDED) The mechanical connection as claimed in claim 1, wherein the hook-like extensions are formed integrally with the angled section.
  - 4. (NEW) A casing comprising:

a base, a pair of side walls and a rear wall all formed from a single sheet of material, such that when assembled each side wall is adjacent to one side of the rear wall;

a cutout formed in each of the side walls in the region of the where the side wall adjoins the rear wall; and

a pair of hook-like extensions extending from the rear wall at positions corresponding to the cutouts such that when assembled, each hook-like extension snaps into a cutout.

Inventors: Heinz-Jürgen NIGGL

#### **REMARKS**

This Preliminary Amendment is submitted to improve the form of the specification as originally-filed. A substitute specification and marked-up copy of the original specification are enclosed. No new matter is added to these documents.

It is respectfully requested that this Preliminary Amendment be entered in the above-referenced application.

If any further fees are required in connection with the filing of this Preliminary Amendment, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 04. (20)

Mark J. Henry

Registration No. 36,162

700 Eleventh Street, NW, Suite 500 Washington, D.C. 20001 (202) 434-1500

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#### **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

#### IN THE CLAIMS:

Please AMEND the following claims:

1. (ONCE AMENDED) A mechanical connection [between side walls and the rear wall of a sheet-metal casing, characterized in that the]comprising:

<u>a sheet metal casing having a</u> base part, <u>a pair of</u> side walls and <u>a</u> rear wall [of the sheet-metal casing comprise]<u>all formed from</u> a single sheet-metal part[,]; [in that the side walls have]

a cutout <u>formed in each of the side walls</u> in the region of the top rear corner[,]; [and in that the rear wall has]

an angled section formed on the rear wall; and

[which, on its sides, has]hook-like extensions <u>provided at sides of the angled section</u>, which <u>hook-like extensions</u> snap into the cutouts of the side walls when the [actual] rear wall is swung into position.

- 2. (ONCE AMENDED) The mechanical connection as claimed in claim 1, [characterized in that]wherein the hook-like extensions [have outwardly running slopes in their front regions]are sloped such that the width increases from a front to a back of the hook-like extensions.
- 3. (ONCE AMENDED) The mechanical connection as claimed in claim 1, [characterized in that]wherein the hook-like extensions are formed integrally with the angled section.

Please ADD the following claim.

- 4. (NEW) A casing comprising:
- a base, a pair of side walls and a rear wall all formed from a single sheet of material, such that when assembled each side wall is adjacent to one side of the rear wall;
- a cutout formed in each of the side walls in the region of the where the side wall adjoins the rear wall; and
- a pair of hook-like extensions extending from the rear wall at positions corresponding to the cutouts such that when assembled, each hook-like extension snaps into a cutout.

#### **SUBSTITUTE ABSTRACT**

In order to produce mechanical connections without additional measures being required, the base part, side walls and rear wall of the sheet-metal casing comprise a single sheet-metal part. The side walls have a cutout in the region of the top rear corner, and the rear wall has an angled section which, on its sides, has hook-like extensions which snap into the cutouts of the side walls when the actual rear wall is swung into position.

Description

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Mechanical connection between side walls and the rear wall of a sheet-metal casing

The present invention relates to a mechanical connection between the side walls and the rear wall of a sheet-metal casing.

The mechanical connection between the side walls of a sheet-metal casing and the rear wall usually takes place by means of additional measures, e.g. welding, riveting, screwing, adhesive bonding, etc. and/or by means of additional manipulating operations, such as, for example, bending lugs, etc.

The object of the present invention is to specify a mechanical connection of the type mentioned in the introduction which can be produced without additional measures being required.

This object is achieved for a mechanical connection of the type mentioned above in that the base part, side walls and rear wall of the sheet-metal casing comprise a single sheet-metal part, in that the side walls have a cutout in the region of the top rear corner, and in that the rear wall has an angled section which, on its sides, has hook-like extensions which snap into the cutouts of the side walls when the actual rear wall is swung into position.

In the case of the mechanical connection according to the invention, the blank of the sheet-metal part, which forms, inter alia, the side walls and the rear wall, is configured such that, during the bending operation immediately after the rear wall has been swung into position, said rear wall is forced to snap into the

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side walls, and mechanical connection between the side walls and the rear wall is thus produced. The additional measures mentioned above are thus dispensed with.

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Further advantageous configurations of the mechanical connection according to the invention can be gathered from the subclaims and from the following description of an exemplary embodiment of the mechanical connection according to the invention with reference to the drawing, in which:

Figure 1 shows the completed mechanical connection,

10 Figure 2 shows a view of part of a side wall and of the rear wall just before the rear wall snaps into the side walls, and

Figures 3 to 5 show different states during the operation of the rear wall snapping into the side walls.

Figure 1 shows a casing part with a mechanical connection according to the present invention, the casing part comprising the base part 1, the side walls 2 and the rear wall 3.

Figure 2 shows the specifics of the details. The side walls 2 have a cutout 4 in the top rear corner. The actual rear wall 3 has an angled section 5, which is produced before the rear wall 3 is actually swung into position. It is conceivable here for it to be possible for the angled section 5 to be produced at the same time as the side walls 2 are swung into position.

The angled sections 5 of the rear wall 3 have hook-like extensions 6 on each of their sides. These hook-like extensions 6 are preferably likewise parts of the single sheet-metal part and each have an outwardly running slope 7 in their front region. When the rear wall 3 is swung into position, said slope slides against the side walls 2, which have already been swung into position, and pushes them apart from one another until the hook-like extensions 6 can pass into the cutouts 4.

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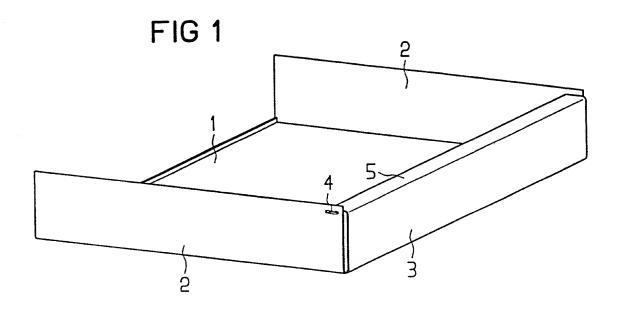
This operation is illustrated in figures 3 to 5. Once the hook-like extensions 6 have passed into the cutouts 4, the rear wall springs back, with the result that the side walls 2 and the rear wall 3 are hooked together.

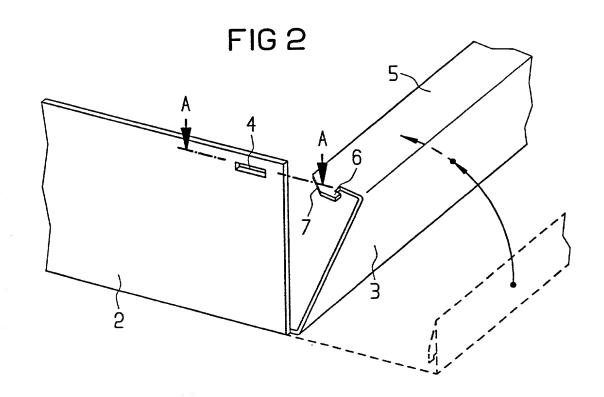
#### Patent Claims

- 1. A mechanical connection between side walls and the rear wall of a sheet-metal casing, characterized in that the base part, side walls and rear wall of the sheet-metal casing comprise a single sheet-metal part, in that the side walls have a cutout in the region of the top rear corner, and in that the rear wall has an angled section which, on its sides, has hook-like extensions which snap into the cutouts of the side walls when the actual rear wall is swung into position.
- The mechanical connection as claimed in claim 1,
   characterized in that the hook-like extensions have outwardly running slopes in their front regions.
- 3. The mechanical connection as claimed in claim 1, characterized in that the hook-like extensions are formed integrally with the angled section.

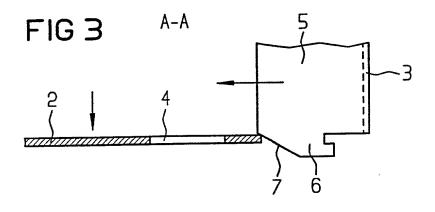
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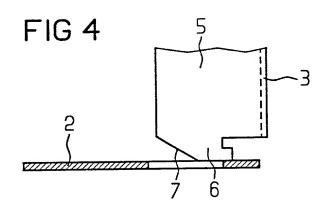
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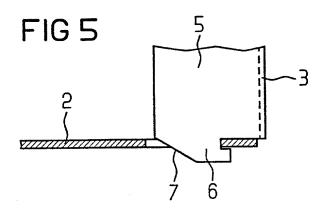




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## **Declaration and Power of Attorney For Patent Application** Erklärung Für Patentanmeldungen Mit Vollmacht

German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eldes Statt:

As a below named inventor, I hereby declare that:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,

My residence, post office address and ottizenship are as stated below next to my name,

dass ich, nach bestem Wissen der ursprüngliche, orste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Petent beantragt wird für die Erfindung mit dem Titel:

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint Inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

#### Verbindung <u>Mechanische</u> Seitenwaenden und Rueckwand eines Blechgehaeuses

and rear wall of a sheet casing

Mechanical link between the side walls

deren Beschreibung

· the specification of which

(zutreffendes ankreuzen) 🔲 hier belgefügt ist. am 29.03.2000 als PC I internationale Anmeldung PCT Anmoldungsnummer PCT/DE00/00955 eingereicht wurde und am abgeändert wurde (fells tetsächlich abgeändert).

(check one) ☐ is attached hereto.	
₩as filed on _ 29.03	,2000 ຄອ
PCT international applic	ation
PCT Application No	PCT/DE00/00955
and was amended on _	
	(if applicable)

ich bestätige hiermit, dass ich den inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgosehen und verständen habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurds.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

ich erkenne meine Pflicht zur Offenbarung irgendweicher Informationen, die für die Prüfung der vorllegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.58(a) von Wichtigkeit eind, an.

I acknowledge the duty to disclose information which is meterial to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

lch beanspruche hiermit ausländische Prioritätsvorteila gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Potont oder sine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindereurkunde nachstehend gekennzeichnet, die ein Anmelde-datum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.

I hereby claim foreign priority bonefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Page 1

		German Langua	ge Declaration		
Prior forcign ap Prioritat beansp	pplications rucht			Priorit	v Claimed
29905811.5 (Number) (Nummer)	<u>DE</u> (Country) (Land)	30.03.1999 (Day Month Yea (Tag Monat Jah	ar Filed) r eingeřeicht)	Yes Je	No Nein
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prozessordnung 120, den Vorz dungen und fall dieser Anme amorikanischen Paragraphen de der Vereinigten erkenne ich ge Paragraph 1.56 Informationen i der früheren An	ne hiermit gemäss Abg der Vereinigten Straug aller unten eufgis der Gegenstand aus dung nieht in Patentaunneldung in Patentaunneldung in Staaton, Paragraph emäss Absatz 37, Braga meine Pflicht zur an, die zwischen der meldung und dem nat Anmeldedatum die den sind	aaten, Paragraph geführten Anmei- s jedem Anspruch ciner früheren laut dem ersten rvilprozeßordnung 122 offenbart ist, undesgesetzbuch, Offenbarung von rt Anmeldedattim tionolen oder PCT	I hereby claim the ben Code. §120 of any Upelow and, insofar as claims of this applicate United States applicate first paragraph of §122, I acknowledge information as define Regulations, §1.56(a) date of the prior applinternational filing date	nited States of the subject maion is not distinct the mister of the cuty to din Title 37, which occured cation and the cuty to the cuty to din Title 37, which occured the cuty of the subject of the subject to the subject to the cuty of the subject to the cuty of the subject to the subject t	application(s) listed atter of each of the closed in the prior anner provided by siled States Code, disclose material, Code of Federal to between the filing to national or PCT
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wissentlich und vorsätzlich falsche Angaben die Gültigkeit der vorllegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

issued thereon.

Page 2

### German Language Declaration

VERTRETUNGSVOLLMACHT. Als benannter Erfinder beauftrage ich hiermit den nachstehend benannten Patentanwalt (oder die nachstehend benannten Patentanwalte) und/oder Patent-Agenten mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Geschäfte vor dem Patent- und Warenzeichenamt: (Name und Registrationsnummer anfibren)

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Form 170-FB-240 (0-83)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (Ilst name and registration number)

Customa	T No. 21171 And I hereby appoint
elefongespräche bitte richten an: lame und Telefonnummer)	Direct Telephone Calls to: (name and tolophon number)
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ostanschrift	Send Correspondence to:
700 Eleventh Street NW, St Telephone: (001) 202 434 1500	Halsey LLP uite 500 20001 Washington, DC and Facsimile (001) 202 434 1501 or
Custome	er No. 21171
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